8 Port HD/SD-SDI Switch

User's Guide

Models

SW-HDSDI-8X1

© 2008 **Avenview Inc.** All rights reserved.

The contents of this document are provided in connection with Avenview Inc. ("Avenview") products. Avenview makes no representations or warranties with respect to the accuracy or completeness of the contents of this publication and reserves the right to make changes to specifications and product descriptions at any time without notice. No license, whether express, implied, or otherwise, to any intellectual property rights is granted by this publication. Except as set forth in Avenview Standard Terms and Conditions of Sale, Avenview assumes no liability whatsoever, and disclaims any express or implied warranty, relating to its products including, but not limited to, the implied warranty of merchantability, fitness for a particular purpose, or infringement of any intellectual property right.

Reproduction of this manual, or parts thereof, in any form, without the express written permission of Avenview Inc. is strictly prohibited.

Table of Contents

Section 1: Getting Started 3

1.1 Important Safeguards 3

1.2 Safety Instructions 3

1.3 Regulatory Notices Federal Communications Commission (FCC) 4

1.4 Introduction 4

1.5 Package Contents 4

1.6 Before Installation 4

1.7 Panel Description 5

1.8 Installation 6

Section 2: Specifications 6

Section 1: Getting Started

1.1 Important Safeguards

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
    - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
    - Repair or attempted repair by anyone not authorized by us.
    - Any damage of the product due to shipment.
    - Removal or installation of the product.
    - Causes external to the product, such as electric power fluctuation or failure.
    - Use of supplies or parts not meeting our specifications.
    - Normal wear and tear.
    - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

1.2 Safety Instructions

The SW-HDSDI-8X1, 8 Port HD/SD-SDI Switch has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the SW-HDSDI-8X1 should be used with care. Read the following safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Do not dismantle the housing or modify the module.
- Dismantling the housing or modifying the module may result in electrical shock or burn.
- Refer all servicing to qualified service personnel.
- Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Have the module checked by a qualified service engineer before using it again.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

1.3 Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

1.4 Introduction

Avenview SW-HDSDI-8X1, 8 Port HD/SD-SDI Switch receives, equalizes 8 SDI inputs, perfectly switches the desired input to SDI equipped monitors or receivers. The switch supports both HD/SD-SDI bit rates, and the re-transmits video signal without degradation. SW-HDSDI-8X1 perfectly displays SDI output to two displays. SW-HDSDI-8X1 is a cost effective SDI switcher and splitter.

- HD/SD-SDI Switch
- 8 equalized SDI inputs
- Dual color LED indication of HD/SD of the output SDI
- Automatic detection of the SDI input
- SYNC IN/OUT
- Low cost 8X1 HD/SD (dual rate) Switch with Dual Outputs (Splitter)
- Provides the equalized transmission path up to 300m (1000 feet) for HD cases
- Multiple control by RS232, IR remote, and push button

1.5 Package Contents

Before you start the installation of the converter, please check the package contents.

- SW-HDSDI-8X1 x 1
- Power Adapter (+5VDC) x1
- IR Remote Control x1
- User's Manual x1

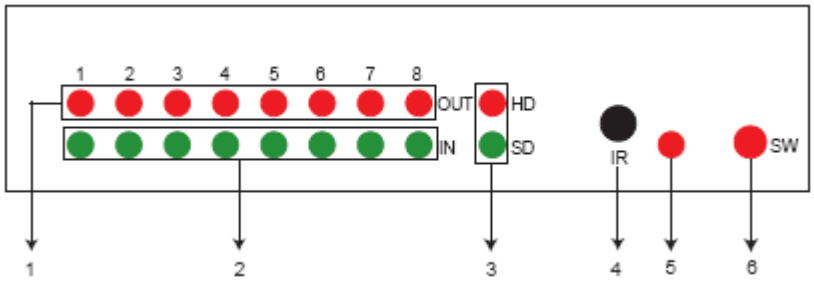
1.6 Before Installation

- Put the product in an even and stable location. If the product falls down or drops, it may cause an injury or malfunction.

- Don’t place the product in too high temperature (over 50°C), too low temperature (under 0°C) or high humidity.
- Use the DC power adapter with correct specifications. If inappropriate power supply is used then it may cause a fire.
- Do not twist or pull by force ends of the optical cable. It can cause malfunction.

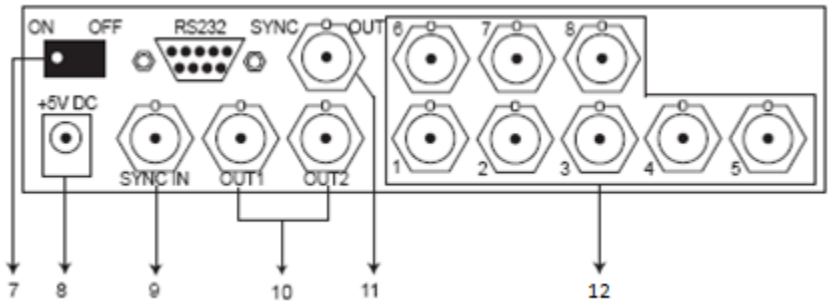
1.7 Panel Description

FRONT PANEL



1. Inputs	2. Input Auto Detection
3. Output HD/SD Detection	4. IR Remote
5. Power indicator	6. Push button

REAR PANEL



7. Power Switch	8. 5V DC Power Jack
9. SYNC Signal Input	10. SDI Output
11. SYNC Signal Loop Out	12. SDI Input

1.8 Installation

To setup Avenview SW-HDSDI-8X1 follow these steps for connecting to a device:

1. Connect SDI enable equipments to the output of SW-HDSDI-8X1
2. Connect the SDI input sources to the inputs of SW-HDSDI-8X1
3. Plug power adapter cable into 5V DC power jack of SW-HDSDI-8X1
4. Use IR Remote, RS232 or front panel push button to switch between inputs.

Section 2: Specifications

Item	Description
Input Connector	8 x BNC SMPTE 292M SMPTE 259M
Output Connector	2 x BNC SMPTE 292M SMPTE 259M
Data Rates	1485, 1483, 270, 143 Mbps
Equalization (HD)	Up to 300m (1000 feet)
Power Supply	5V DC
Amplitude	Within 800mV+-3% (<10%)
Rise Overshoot	Less than 2% (<10%)
Fall Overshoot	Less than 2% (<10%)
Long Time Jitter	0.195 ui (<1.0 ui)
Timing Jitter	0.195 ui (<1.0 ui)
Alignment Jitter	0.127 ui (< 0.2 ui)
Dimension (L x W x H)	7.4” x 4.9” x 1.7”
Weight	890g (31.4oz)
Environmental	
Operation	0˚ to 50˚C Degree

Disclaimer

While every precaution has been taken in the preparation of this document, Avenview Inc. assumes no liability with respect to the operation or use of Avenview hardware, software or other products and documentation described herein, for any act or omission of Avenview concerning such products or this documentation, for any interruption of service, loss or interruption of business, loss of anticipatory profits, or for punitive, incidental or consequential damages in connection with the furnishing, performance, or use of the Avenview hardware, software, or other products and documentation provided herein.

Avenview Inc. reserves the right to make changes without further notice to a product or system described herein to improve reliability, function or design. With respect to Avenview products which this document relates, Avenview disclaims all express or implied warranties regarding such products, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, and non-infringement.